Attorney's Docket No.: 07039-409US1 / MMV-02-036

IN THE UNITED STATES RECEIVING OFFICE

Applicant : Shuchong Pan, et. al.
Serial No. : 10/561,014
Filed : December 16, 2005
Title : ISOFORMS OF BRAIN NATRIURETIC PEPTIDE

MAIL STOP PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
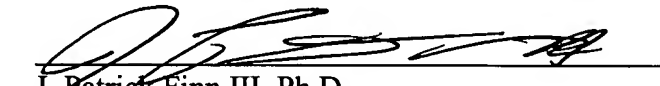
RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS

In response to the Notification of Missing Requirements mailed April 6, 2006 (copy enclosed), Applicants as a small entity submit herewith the following:

- ☒ Declaration by the Inventor (3 pages);
- ☒ Power of Attorney by Assignee (with executed copy of Assignment attached) (5 pages);
- ☒ Preliminary Amendment (3 pages);
- ☒ Paper Copy of Substitute Sequence Listing (12 pages);
- ☒ Verified Statement;
- ☒ Diskette.

It is understood that this perfects the application and no additional papers or filing fees are required. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: _June 6, 2006_

J. Patrick Finn III, Ph.D.
Reg. No. 44,109

Fish & Richardson P.C.
60 South Sixth Street, Suite 3300
Minneapolis, MN 55402
Telephone: (612) 335-5070
Facsimile: (612) 288-9696
60362217.doc

06/09/2006 LLANDGRA 00000060 10561014
01 FC:2617   65.00 OP

CERTIFICATE OF MAILING BY EXPRESS MAIL

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___June 6, 2006___
Date of Deposit

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U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/561,014	Shuchong Pan	07039-409US1

INTERNATIONAL APPLICATION NO.		
PCT/US04/17554		
I.A. FILING DATE	PRIORITY DATE	
06/02/2004	06/20/2003	

26191
FISH & RICHARDSON P.C.
PO BOX 1022
MINNEAPOLIS, MN 55440-1022

CONFIRMATION NO. 9426

371 FORMALITIES LETTER

OC000000018465808

Date Mailed: 04/06/2006

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Indication of Small Entity Status
- Copy of the International Application filed on 12/16/2005
- Preliminary Amendments filed on 12/16/2005
- Biochemical Sequence Diskette filed on 12/16/2005
- U.S. Basic National Fees filed on 12/16/2005
- Priority Documents filed on 12/16/2005

The applicant needs to satisfy supplemental fees problems indicated below.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.

- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath or declaration) as set forth in 37 CFR 1.492(h) of $65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.

SUMMARY OF FEES DUE:

Total additional fees required for this application is **$65** for a Small Entity:

- **$65** Surcharge.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

INDIA L EVANS

Telephone: (703) 308-9140 EXT 212

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/561,014	PCT/US04/17554	07039-409US1

FORM PCT/DO/EO/905 (371 Formalities Notice)

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information
Center (STIC) detected errors when processing the following computer readable
form:

Application Serial Number: _10/561,014_
Source: _1FWP_
Date Processed by STIC: _12/30/05_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE
   APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A
   NOTICE TO COMPLY
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT
MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE __CHECKER__
__VERSION 4.2.2 PROGRAM__, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
   http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is
a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the
United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , EFS Submission
   User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
   U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
   Alexandria, VA 22314

Revised 01/24/05

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: _10/561,014_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1____Wrapped Nucleics / Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2____Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.

3____Misaligned Amino Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4____Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5____Variable Length Sequence(s)____contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6____PatentIn 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220><223> section to the subsequent amino acid sequence. This applies to the mandatory <220><223> sections for Artificial or Unknown sequences.

7____Skipped Sequences (OLD RULES) Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8____Skipped Sequences (NEW RULES) Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9____Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10____Invalid <213> Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence

11____Use of <220> ~~Sequence(s)_____ missing the <220> "Feature" and associated numeric identifiers and responses.~~
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown.". Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of Sequence Rules)

12____PatentIn 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13____ Misuse of n/Xaa "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

AMC – Biotechnology Systems Branch – 09/09/2003

IFWP

RAW SEQUENCE LISTING   DATE: 12/30/2005
PATENT APPLICATION: US/10/561,014   TIME: 09:38:13

Input Set : A:\07039-409.txt
Output Set: N:\CRF4\12302005\J561014.raw

```
   4 <110> APPLICANT: Pan, Shuchong
   5        Simari, Robert D.
   7 <120> TITLE OF INVENTION: Isoforms of Brain Natriuretic Peptide
  10 <130> FILE REFERENCE: 07039-409US1
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/561,014
C--> 12 <141> CURRENT FILING DATE: 2005-12-16
  12 <150> PRIOR APPLICATION NUMBER: PCT/US2004/017554
  13 <151> PRIOR FILING DATE: 2004-06-02
  15 <150> PRIOR APPLICATION NUMBER: US 60/480,460
  16 <151> PRIOR FILING DATE: 2003-06-20
  18 <160> NUMBER OF SEQ ID NOS: 38
  20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
  22 <210> SEQ ID NO: 1
  23 <211> LENGTH: 33
  24 <212> TYPE: PRT
  25 <213> ORGANISM: Homo sapiens
  27 <400> SEQUENCE: 1
  28 Gly Lys His Pro Leu Pro Pro Arg Pro Pro Ser Pro Ile Pro Val Cys
  29 1               5                   10                  15
  30 Asp Thr Val Arg Val Thr Leu Gly Phe Val Val Ser Gly Asn His Thr
  31             20                  25                  30
  32 Leu
  35 <210> SEQ ID NO: 2
  36 <211> LENGTH: 14
  37 <212> TYPE: PRT
  38 <213> ORGANISM: Homo sapiens
  40 <400> SEQUENCE: 2
  41 Val Val Gln Lys Glu Asn Gln Thr Phe Pro Pro Gly Phe Leu
  42 1               5                   10
  44 <210> SEQ ID NO: 3
  45 <211> LENGTH: 162
  46 <212> TYPE: PRT
  47 <213> ORGANISM: Homo sapiens
  49 <400> SEQUENCE: 3
  50 Met Asp Pro Gln Thr Ala Pro Ser Arg Ala Leu Leu Leu Leu Leu Phe
  51 1               5                   10                  15
  52 Leu His Leu Ala Phe Leu Gly Gly Arg Ser His Pro Leu Gly Ser Pro
  53             20                  25                  30
  54 Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn
  55             35                  40                  45
  56 His Leu Gln Gly Lys Leu Ser Glu Leu Gln Val Glu Gln Thr Ser Leu
  57     50                  55                  60
  58 Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg
```

RAW SEQUENCE LISTING   DATE: 12/30/2005
PATENT APPLICATION: US/10/561,014   TIME: 09:38:13

Input Set : A:\07039-409.txt
Output Set: N:\CRF4\12302005\J561014.raw

```
59 65                    70                75                80
60 Glu Val Ala Thr Glu Gly Ile Arg Gly His Arg Lys Met Val Leu Tyr
61              85                90                95
62 Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser Gly Cys
63            100               105               110
64 Phe Gly Arg Lys Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys
65          115               120               125
66 Lys Gly Lys His Pro Leu Pro Pro Arg Pro Pro Ser Pro Ile Pro Val
67        130               135               140
68 Cys Asp Thr Val Arg Val Thr Leu Gly Phe Val Val Ser Gly Asn His
69 145               150               155               160
70 Thr Leu
73 <210> SEQ ID NO: 4
74 <211> LENGTH: 143
75 <212> TYPE: PRT
76 <213> ORGANISM: Homo sapiens
78 <400> SEQUENCE: 4
79 Met Asp Pro Gln Thr Ala Pro Ser Arg Ala Leu Leu Leu Leu Leu Phe
80  1                 5                10                15
81 Leu His Leu Ala Phe Leu Gly Gly Arg Ser His Pro Leu Gly Ser Pro
82             20                25                30
83 Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn
84           35                40                45
85 His Leu Gln Gly Lys Leu Ser Glu Leu Gln Val Glu Gln Thr Ser Leu
86        50                55                60
87 Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg
88 65                70                75                80
89 Glu Val Ala Thr Glu Gly Ile Arg Gly His Arg Lys Met Val Leu Tyr
90              85                90                95
91 Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser Gly Cys
92            100               105               110
93 Phe Gly Arg Lys Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys
94          115               120               125
95 Lys Val Val Gln Lys Glu Asn Gln Thr Phe Pro Pro Gly Phe Leu
96        130               135               140
98 <210> SEQ ID NO: 5
99 <211> LENGTH: 489
100 <212> TYPE: DNA
101 <213> ORGANISM: Homo sapiens
103 <400> SEQUENCE: 5
104 atggatcccc agacagcacc ttcccgggcg ctcctgctcc tgctcttctt gcatctggct      60
105 ttcctgggag gtcgttccca cccgctgggc agccccggtt cagcctcgga cttggaaacg     120
106 tccgggttac aggagcagcg caaccatttg cagggcaaac tgtcggagct gcaggtggag     180
107 cagacatccc tggagccccт ccaggagagc ccccgtccca caggtgtctg gaagtcccgg     240
108 gaggtagcca ccgagggcat ccgtgggcac cgcaaaatgg tcctctacac cctgcgggca     300
109 ccacgaagcc ccaagatggt gcaagggtct ggctgctttg ggaggaagat ggaccggatc     360
110 agctcctcca gtggcctggg ctgcaaaggt aagcacccct gccaccccg gccgccttcc      420
111 cccattccag tgtgtgacac tgttagagtc actttggggt ttgttgtctc tgggaaccac     480
112 actctttga                                                             489
```

RAW SEQUENCE LISTING   DATE: 12/30/2005
PATENT APPLICATION: US/10/561,014 TIME: 09:38:13

Input Set : A:\07039-409.txt
Output Set: N:\CRF4\12302005\J561014.raw

```
114 <210> SEQ ID NO: 6
115 <211> LENGTH: 432
116 <212> TYPE: DNA
117 <213> ORGANISM: Homo sapiens
119 <400> SEQUENCE: 6
120 atggatcccc agacagcacc ttcccgggcg ctcctgctcc tgctcttctt gcatctggct      60
121 ttcctgggag gtcgttccca cccgctgggc agccccggtt cagcctcgga cttggaaacg     120
122 tccgggttac aggagcagcg caaccatttg cagggcaaac tgtcggagct gcaggtggag     180
123 cagacatccc tggagcccct ccaggagagc ccccgtccca caggtgtctg gaagtcccgg     240
124 gaggtagcca ccgagggcat ccgtgggcac cgcaaaatgg tcctctacac cctgcgggca     300
125 ccacgaagcc ccaagatggt gcaagggtct ggctgctttg ggaggaagat ggaccggatc     360
126 agctcctcca gtggcctggg ctgcaaagtg gtgcagaaag agaaccaaac atttcctcct     420
127 ggtttcctct aa                                                         432
129 <210> SEQ ID NO: 7
130 <211> LENGTH: 44
131 <212> TYPE: PRT
132 <213> ORGANISM: Pongo pygmaeus
134 <400> SEQUENCE: 7
135 Gly Glu His Pro Leu Pro Pro Arg Leu Pro Ala Pro Ile Pro Val Cys
136 1               5                   10                  15
137 Asp Thr Val Arg Val Thr Leu Gly Phe Val Val Ser Gly Asn His Thr
138             20                  25                  30
139 Leu Arg Lys Cys His Leu Asp Ile Thr Ser Ser Cys
140         35                  40
142 <210> SEQ ID NO: 8
143 <211> LENGTH: 58
144 <212> TYPE: PRT
145 <213> ORGANISM: Sus scrofa
147 <400> SEQUENCE: 8
148 Gly Glu His Pro Pro Pro Phe Pro Leu His Ala Pro Val Ser Ile Thr
149 1               5                   10                  15
150 Ser Gly Phe Asp Val Ser Gly Asp Gln Thr Pro Arg Lys Gly His Leu
151             20                  25                  30
152 Asp Ile Thr Leu Ser Cys Cys Gln Ser Ser Arg Pro Arg Ser Ala Phe
153         35                  40                  45
154 Leu Glu Lys Leu Asn Leu Asp Ser Ile His
155     50                  55
157 <210> SEQ ID NO: 9
158 <211> LENGTH: 33
159 <212> TYPE: PRT
160 <213> ORGANISM: Pan troglodytes
162 <400> SEQUENCE: 9
163 Gly Glu His Pro Leu Pro Pro Arg Pro Pro Ser Pro Ile Pro Val Cys
164 1               5                   10                  15
165 Asp Thr Val Arg Val Thr Leu Gly Phe Val Val Ser Gly Asn His Thr
166             20                  25                  30
167 Leu
170 <210> SEQ ID NO: 10
171 <211> LENGTH: 78
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RAW SEQUENCE LISTING   DATE: 12/30/2005
PATENT APPLICATION: US/10/561,014   TIME: 09:38:13

Input Set : A:\07039-409.txt
Output Set: N:\CRF4\12302005\J561014.raw

```
172 <212> TYPE: PRT
173 <213> ORGANISM: Ovis aries
175 <400> SEQUENCE: 10
176 Gly Glu Arg Leu Ser Ala Phe Pro Leu His Ile Thr Ile Arg Ala Thr
177 1               5                   10                  15
178 Ser Gly Ser Asp Val Ser Gly Asp Gln Ile Leu Asn Lys Glu His His
179             20                  25                  30
180 Ser Ser Leu Leu Ala Val Leu Arg Ala Lys Ala Cys Leu Ser Gly Asn
181         35                  40                  45
182 Ile Lys Phe Gly Gln His Ser Leu Ser Cys Leu Gly Ala Pro Ser Ile
183     .50                 55                  60
184 His Leu Leu Pro Leu Thr Glu Arg Gly Arg Ile Phe Arg Met
185 65                  70                  75
187 <210> SEQ ID NO: 11
188 <211> LENGTH: 26
189 <212> TYPE: PRT
190 <213> ORGANISM: Mus musculus
192 <400> SEQUENCE: 11
193 Gly Glu His Leu Pro Cys His Phe Pro Ala Lys Leu His Thr His Pro
194 1               5                   10                  15
195 Ile Pro Val His Ala Thr Leu Arg Gly Pro
196             20                  25
198 <210> SEQ ID NO: 12
199 <211> LENGTH: 33
200 <212> TYPE: PRT
201 <213> ORGANISM: Gorilla gorilla
203 <400> SEQUENCE: 12
204 Gly Glu His Pro Leu Pro Pro Arg Pro Pro Ser Pro Ile Pro Val Cys
205 1               5                   10                  15
206 Asp Thr Val Arg Val Thr Leu Gly Phe Val Val Ser Gly Asn His Thr
207             20                  25                  30
208 Leu
211 <210> SEQ ID NO: 13
212 <211> LENGTH: 86
213 <212> TYPE: PRT
214 <213> ORGANISM: Felis catus
216 <400> SEQUENCE: 13
217 Gly Lys Pro Pro Pro Cys Gln Leu Asp Pro Pro Ala Pro Leu Leu Trp
218 1               5                   10                  15
219 Val Pro Pro Ser Glu Pro Leu Leu Gly Leu Leu Ser Leu Gly Thr Asn
220             20                  25                  30
221 Ser Glu Lys Lys Thr Leu Gly Leu Tyr Ser Leu Leu Leu Thr Val Leu
222         35                  40                  45
223 Lys Ala Lys Gly Arg Leu Ser Gly Asn Ile Lys Cys Gly His His Ser
224     50                  55                  60
225 Leu Leu Cys Pro Pro Arg Val Thr His Leu Leu Leu Pro Leu Trp Pro
226 65                  70                  75                  80
227 Lys Gly Ala Glu Ser Pro
228                 85
```

RAW SEQUENCE LISTING   DATE: 12/30/2005
PATENT APPLICATION: US/10/561,014   TIME: 09:38:13

Input Set : A:\07039-409.txt
Output Set: N:\CRF4\12302005\J561014.raw

```
230 <210> SEQ ID NO: 14
231 <211> LENGTH: 169
232 <212> TYPE: PRT
233 <213> ORGANISM: Canis familiaris
235 <400> SEQUENCE: 14
236 Met Glu Pro Cys Ala Ala Leu Pro Arg Ala Leu Leu Leu Leu Phe
237 1               5                  10                  15
238 Leu His Leu Ser Pro Leu Gly Gly Arg Pro His Pro Leu Gly Gly Arg
239             20              25                  30
240 Ser Pro Thr Ser Glu Ala Ser Glu Ala Ser Glu Ala Ser Gly Leu Trp
241         35              40                  45
242 Ala Val Gln Glu Leu Leu Gly Arg Leu Lys Asp Ala Val Ser Glu Leu
243     50                  55                  60
244 Gln Ala Glu Gln Leu Ala Leu Glu Pro Leu His Arg Ser His Ser Pro
245 65                  70                  75                  80
246 Ala Glu Ala Pro Glu Ala Gly Glu Glu Arg Pro Val Gly Val Leu Ala
247             85                  90                  95
248 Pro His Asp Ser Val Leu Gln Ala Leu Arg Arg Leu Arg Ser Pro Lys
249             100                 105                 110
250 Met Met His Lys Ser Gly Cys Phe Gly Arg Arg Leu Asp Arg Ile Gly
251         115                 120                 125
252 Ser Leu Ser Gly Leu Gly Cys Asn Gly Lys Pro Pro Pro Cys His Leu
253     130                 135                 140
254 Gly Ser Pro Ser Pro Ala Pro Trp Val Arg Pro Leu Glu Pro Leu Leu
255 145                 150                 155                 160
256 Gly Leu Leu Ser Arg Gly Ile Thr Leu
257                 165
259 <210> SEQ ID NO: 15
260 <211> LENGTH: 15
261 <212> TYPE: PRT
262 <213> ORGANISM: Dendoaspis angusticeps
264 <400> SEQUENCE: 15
265 Pro Ser Leu Arg Asp Pro Arg Pro Asn Ala Pro Ser Thr Ser Ala
266 1               5                  10                  15
268 <210> SEQ ID NO: 16
269 <211> LENGTH: 32
270 <212> TYPE: PRT
271 <213> ORGANISM: Homo sapiens
273 <400> SEQUENCE: 16
274 Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
275 1               5                  10                  15
276 Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His
277             20              25                  30
279 <210> SEQ ID NO: 17
280 <211> LENGTH: 41
281 <212> TYPE: PRT
282 <213> ORGANISM: Dendroaspis angusticeps
284 <400> SEQUENCE: 17
285 Glu Val Lys Tyr Asp Pro Cys Phe Gly His Lys Ile Asp Arg Ile Asn
```

```
<210> 20
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<225> polypeptide
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insufficient explanation - give source of genetic material (see item 11 on Error Summary Sheet)

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 12/30/2005
PATENT APPLICATION: US/10/561,014   TIME: 09:38:14

Input Set : A:\07039-409.txt
Output Set: N:\CRF4\12302005\J561014.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:20; Xaa Pos. 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Seq#:20; Xaa Pos. 24,25,26,27,28,29,31,32,33,34

Input Set : A:\07039-409.txt
Output Set: N:\CRF4\12302005\J561014.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:322 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:326 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:330 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:334 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
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L:395 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:400 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:404 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:408 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:412 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:416 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:420 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:424 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:428 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:432 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:436 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:440 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:444 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:448 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:452 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:453 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:455 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:16
L:457 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:32